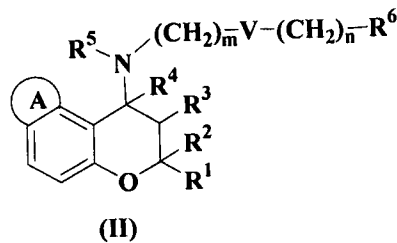
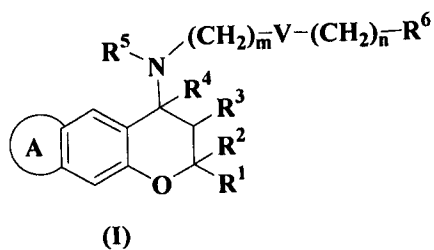


Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A benzopyran derivative of formula (I) or (II), or pharmaceutically acceptable salt thereof



wherein

R^1 and R^2 are independently of each other

(i) hydrogen atom,

(ii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:

(1) halogen atom,

(2) C_{1-6} alkoxy group wherein the alkoxy group may be

substituted with halogen atom or

(3) hydroxy group, or

(iii) C_{6-14} aryl group, wherein the aryl group may be substituted with:

(1) halogen atom,

(2) hydroxy group,

(3) nitro group,

(4) cyano group,

(5) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:

(a) halogen atom,

(b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with a halogen atom, or

(c) hydroxy ~~group~~ or group, or

(6) C₁₋₆ alkoxy group wherein the alkoxy group may be substituted with halogen atom;

R³ is hydroxy group or C₁₋₆ alkylcarbonyloxy group, or R³ forms a bond together with R⁴;

R⁴ is hydrogen atom, or R⁴ forms a bond together with R³;

m is an integer of 0 to 4;

n is an integer of 0 to 4;

V is a single bond, CR⁷R⁸ wherein R⁷ is

(i) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(1) halogen atom,

(2) hydroxy group,

(3) C₁₋₆ alkoxy group wherein the C₁₋₆ alkoxy group may be substituted with halogen atom,

(4) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R¹⁰, wherein R¹⁰ is

(a) halogen atom;

(b) hydroxy group;

(c) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with halogen atom, hydroxy group or C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom;

(d) C₁₋₆ alkoxy group wherein the alkoxy group may be substituted with halogen atom;

(e) nitro group; cyano group; formyl group; formamide group;
 sulfonylamino group; sulfonyl group; amino group;
 C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino group;
 C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group;
 aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group;
 di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group;
 C₁₋₆ alkoxycarbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl
 group; carboxy group or C₆₋₁₄ arylcarbonyl group,

and when a plurality of R¹⁰ are present, they may be identical or different from each other;

(5) C₁₋₆ alkylcarbonyloxy group; nitro group; cyano group; formyl group;
 formamide group; amino group; C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino
 group; C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group;
 aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group;
 di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group;
 C₁₋₆ alkoxycarbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl group;
 carboxy group or sulfonyl group;

(ii) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R¹⁰, wherein R¹⁰ has the above-mentioned meaning;

(iii) hydroxy group;

(iv) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom; or

(v) nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino group;

C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group; aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group; di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group; C₁₋₆ alkoxy carbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl group; carboxy group,

(vi) C₆₋₁₄ arylcarbonyl group or C₂₋₉ heteroarylcarbonyl group, wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be substituted with 1 to 3 R¹⁰ wherein R¹⁰ has the above-mentioned meaning, and

R⁸ is

(i) hydrogen atom,

(ii) C₁₋₆ alkyl group, wherein the C₁₋₆ alkyl group may be substituted with:

(1) halogen atom,

(2) hydroxy group,

(3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(4) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R¹⁷, wherein R¹⁷ has the same meaning as R¹⁰,

(5) C₁₋₆ alkylcarbonyloxy group; nitro group; cyano group; formyl group; formamide group; amino group; C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino group; C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group; aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group; di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group; C₁₋₆ alkoxy carbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl group; carboxy group or sulfonyl group;

(iii) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R¹⁷, wherein R¹⁷ has the same meaning as R¹⁰;

(iv) hydroxy group;

(v) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom, or

(vi) nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino group; C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group; aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group; di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group; C₁₋₆ alkoxy carbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl group; carboxy group, C₆₋₁₄ arylcarbonyl group or C₂₋₉ heteroarylcarbonyl group, wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be substituted with 1 to 3 R¹⁷, wherein R¹⁷ has the same meaning as R¹⁰, or R⁷ together with R⁸ may represent =O or =S, or

V is NR⁹ wherein R⁹ is

(i) hydrogen atom,

(ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with a halogen atom,

(3) hydroxy group,

(4) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R¹⁷, wherein R¹⁷ has the same meaning as R¹⁰,

- (6) C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆ alkylaminocarbonyl group, C₁₋₆ alkylcarbonyl group, C₃₋₈ cycloalkylcarbonyl group, C₁₋₆ alkoxy carbonyl group, C₁₋₆ alkylsulfonyl group, carboxy group, C₆₋₁₄ arylsulfonyl group or C₂₋₉ heteroarylsulfonyl group,
- (iii) C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆ alkylaminocarbonyl group, C₁₋₆ alkylcarbonyl group, C₃₋₈ cycloalkylcarbonyl group, C₁₋₆ alkoxy carbonyl group, C₁₋₆ alkylsulfonyl group,
- (iv) C₆₋₁₄ arylsulfonyl group or C₂₋₉ heteroarylsulfonyl group, wherein each of the arylsulfonyl group or heteroarylsulfonyl group may be substituted with 1 to 3 R¹⁷, wherein R¹⁷ has the same meaning as R¹⁰,
- (v) carboxy group;
- (vi) C₆₋₁₄ arylcarbonyl group or C₂₋₉ heteroarylcarbonyl group, wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be substituted with 1 to 3 R¹⁷, wherein R¹⁷ has the same meaning as R¹⁰;
- (vii) or O, S, SO or SO₂;

R⁵ is hydrogen atom or C₁₋₆ alkyl group, wherein the alkyl group may be substituted with

- (i) halogen atom,
- (ii) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom, or
- (iii) hydroxy group; and

R⁶ is

- (i) hydrogen atom,
- (ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:
 - (1) halogen atom,
 - (2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with

halogen atom,

(3) amino group,

(4) carboxy group or

(5) hydroxy group,

(iii) C₃₋₈ cycloalkyl group or C₃₋₈ cycloalkenyl group, wherein the cycloalkyl group or cycloalkenyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(a) halogen atom,

(b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(c) amino group,

(d) carboxy group or

(e) hydroxy group,

(3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(4) amino,

(5) carboxy group or

(6) hydroxy group,

(iv) amino group, C₁₋₆ alkylamino group, di-C₁₋₆ alkylamino group,

(v) C₆₋₁₄ arylamino group or C₂₋₉ heteroaryl amino group, wherein each of the arylamino group or heteroaryl amino group may be substituted with 1 to 3 R¹⁸, wherein R¹⁸ has the same meaning as R¹⁰;

(v) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R¹⁸, wherein R¹⁸ has the same

meaning as R¹⁰; or

(vi) C₂₋₉ heterocyclyl group, wherein the heterocyclyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(a) halogen atom,

(b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(c) amino group,

(d) carboxy group or

(e) hydroxy group,

(3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(4) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with

1 to 3 R¹⁸, wherein R¹⁸ has the same meaning as R¹⁰,

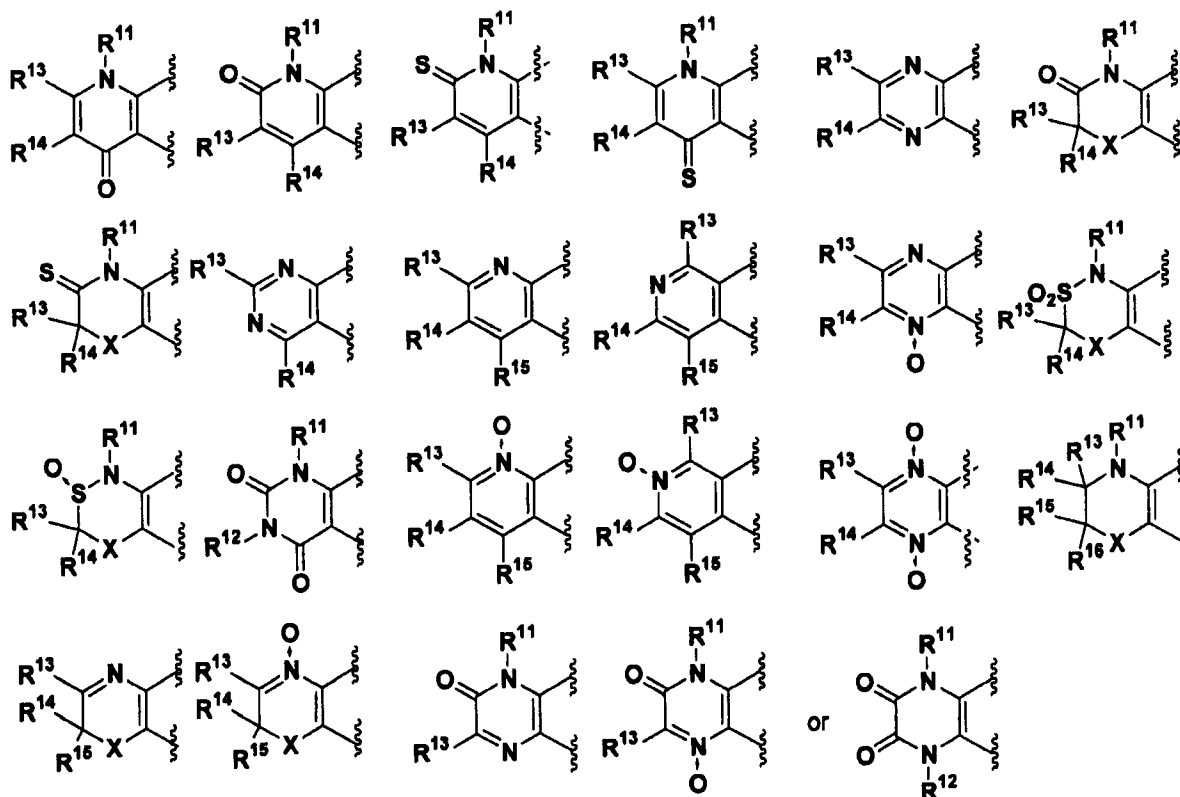
(5) hydroxy group, nitro group, cyano group, formyl group, formamide group, amino group, C₁₋₆ alkylamino group, di-C₁₋₆ alkylamino group,

C₁₋₆ alkylcarbonylamino group, C₁₋₆ alkylsulfonylamino group, aminocarbonyl group, C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆ alkylaminocarbonyl group,

C₁₋₆ alkylcarbonyl group, C₁₋₆ alkoxycarbonyl group; aminosulfonyl group,

C₁₋₆ alkylsulfonyl group, carboxy group or C₆₋₁₄ arylcarbonyl group;

A is:



wherein R^{11} and R^{12} are independently of each other:

- (i) hydrogen atom,
- (ii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:
 - (1) halogen atom,
 - (2) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (3) hydroxy group,
 - (4) C_{6-14} aryl group or C_{2-9} heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R^{19} , wherein R^{19} has the same meaning as R^{10} ,
 - (5) C_{1-6} alkylaminocarbonyl group, di- C_{1-6} alkylaminocarbonyl group,

C₁₋₆ alkylcarbonyl group, C₃₋₈ cycloalkylcarbonyl group, C₁₋₆ alkoxy carbonyl group, C₁₋₆ alkylsulfonyl group, carboxy group, C₆₋₁₄ arylcarbonyl group or C₂₋₉ heteroarylcarbonyl group,

(iii) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R¹⁹, wherein R¹⁹ has the same meaning as R¹⁰,

(iv) C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆ alkylaminocarbonyl group, C₁₋₆ alkylcarbonyl group, C₃₋₈ cycloalkylcarbonyl group, C₁₋₆ alkoxy carbonyl group, C₁₋₆ alkylsulfonyl group,

(v) C₆₋₁₄ arylsulfonyl group or C₂₋₉ heteroarylsulfonyl group, wherein each of the arylsulfonyl group or heteroarylsulfonyl group may be substituted with 1 to 3 R¹⁹ wherein R¹⁹ has the same meaning as R¹⁰,

(vi) carboxy group;

(vii) C₆₋₁₄ arylcarbonyl group or C₂₋₉ heteroarylcarbonyl group, wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be substituted with 1 to 3 R¹⁹ wherein R¹⁹ has the same meaning as R¹⁰,

R¹³, R¹⁴, R¹⁵ and R¹⁶ are, independently of each other,

(i) hydrogen atom,

(ii) halogen atom,

(iii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(3) amino group,

(4) hydroxy group,

- (5) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R²⁰, wherein R²⁰ has the same meaning as R¹⁰,
- (6) C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆ alkylaminocarbonyl group, C₁₋₆ alkylcarbonyl group, C₃₋₈ cycloalkylcarbonyl group, C₁₋₆ alkoxycarbonyl group, C₁₋₆ alkylsulfonyl group, carboxy group, C₆₋₁₄ arylcarbonyl group or C₂₋₉ heteroarylcarbonyl group,
- (iv) C₁₋₆ alkoxy group, wherein the alkoxy group may be arbitrarily substituted with halogen atom,
- (v) carboxy group,
- (vi) amino group,
- (vii) hydroxy group,
- (viii) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R²⁰, wherein R²⁰ has the same meaning as R¹⁰,
- (ix) C₁₋₆ thioalkoxy group, wherein the thioalkoxy group may be substituted with:
- (1) halogen atom,
 - (2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (3) carboxy group,
 - (4) hydroxy group,
 - (5) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R²⁰, wherein R²⁰ has the same meaning as R¹⁰,

- (6) C₁₋₆ alkylcarbonyloxy group, nitro group, cyano group, formyl group, formamide group, amino group, sulfonyl group, C₁₋₆ alkylamino group, di-C₁₋₆ alkylamino group,
- (7) C₆₋₁₄ arylamino group or C₂₋₉ heteroarylamino group, wherein each of the arylamino group or heteroarylamino group may be substituted with 1 to 3 R²⁰, wherein R²⁰ has the same meaning as R¹⁰,
- (8) C₁₋₆ alkylcarbonyloxyamino group, C₁₋₆ alkylsulfonylamino group, aminocarbonyl group, C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆ alkylaminocarbonyl group, C₁₋₆ alkylcarbonyl group,
- (9) C₆₋₁₄ arylcarbonyl group or C₂₋₉ heteroarylcarbonyl group, wherein each of the arylcarbonyl group or heteroarylcarbonyl group may be substituted with 1 to 3 R²⁰, wherein R²⁰ has the same meaning as R¹⁰,
- (10) C₁₋₆ alkoxycarbonyl group, aminosulfonyl group, C₁₋₆ alkylsulfonyl group,
- (11) C₆₋₁₄ arylsulfonyl group or C₂₋₉ heteroarylsulfonyl group, wherein each of the arylsulfonyl group or heteroarylsulfonyl group may be substituted with 1 to 3 R²⁰, wherein R²⁰ has the same meaning as R¹⁰,
- (12) carboxy group,
- (13) sulfonyl group or
- (14) C₂₋₉ heterocyclyl group, wherein the heterocyclyl group may be substituted with:
- (a) halogen atom,
- (b) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:
- (A) halogen atom,

(B) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(C) amino group,

(D) carboxy group or

(E) hydroxy group,

(c) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(d) C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R²⁰, wherein R²⁰ has the same meaning as R¹⁰,

(e) hydroxy group, nitro group, cyano group, fomyl group, formamide group, amino group, C₁₋₆ alkylamino group, di-C₁₋₆ alkylamino group, C₁₋₆ alkylcarbonylamino group, C₁₋₆ alkylsulfonylamino group, aminocarbonyl group, C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆ alkylaminocarbonyl group, C₁₋₆ alkylcarbonyl group, C₁₋₆ alkoxy carbonyl group, aminosulfonyl group, C₁₋₆ alkylsulfonyl group, carboxy group or C₆₋₁₄ arylcarbonyl group, and

X is O, S, SO or SO₂.

2. (Canceled)

3. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 1, wherein R¹ and R² are methyl group, R³ is hydroxy group, and R⁴ is hydrogen atom.

4. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 3, wherein R⁵ is hydrogen atom, m is an integer of 0 to 3 and n is an integer of 0 to 2.

5. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 4, wherein V is a single bond.
6. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 5, wherein m is an integer of 1 to 3, n is 0, and R⁶ is C₆₋₁₄ aryl group wherein the aryl group may be substituted with 1 to 3 R¹⁸ wherein R¹⁸ has the same meaning as R¹⁰.
7. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 6, wherein m is 2.
8. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 7, wherein R⁶ is C₆₋₁₄ aryl group wherein the aryl group may be substituted with 1 to 3 halogen atom or amino group, when and when a plurality of substituents are present, they may be identical or different from each other.
9. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 5, wherein m is an integer of 1 to 3, n is 0, and R⁶ is C₂₋₉ heteroaryl group wherein the heteroaryl group may be substituted with 1 to 3 R¹⁸ wherein R¹⁸ has the same meaning as R¹⁰.
10. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 9, wherein m is 2.
11. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 10, wherein R⁶ is 2-pyridyl group, 3-pyridyl group or 4-pyridyl group.
12. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 5, wherein m is an integer of 1 to 3, n is 0, and R⁶ is:
- (i) C₂₋₄ alkyl group, wherein the alkyl group may be substituted with:

- (1) halogen atom,
 - (2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (3) amino group,
 - (4) carboxy group or
 - (5) hydroxy group,
- (ii) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
- (iii) amino group,
- (iv) carboxy group,
- (v) hydroxy group,
- (vi) C₃₋₈ cycloalkyl group or C₃₋₈ cycloalkenyl group, wherein the cycloalkyl group or cycloalkenyl group may be substituted with:
- (1) halogen atom,
 - (2) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:
 - (a) halogen atom,
 - (b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (c) amino group,
 - (d) carboxy group or
 - (e) hydroxy group
 - (3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (4) amino group,
 - (5) carboxy group or

(6) hydroxy group,

(vii) or C₂₋₉ heterocyclyl group, wherein the heterocyclyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(a) halogen atom,

(b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(c) amino group,

(d) carboxy group or

(e) hydroxy group,

(3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(4) hydroxy group or

(5) amino group.

13. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 12, wherein m is 2.

14. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 13, wherein R⁶ is n-propyl group, i-propyl group, c-pentyl group, c-hexyl group, 1-c-pentenyl group, 2-c-pentenyl group, 3-c-pentenyl group, 1-c-hexenyl group, 2-c-hexenyl group or 3-c-hexenyl group.

15. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 4, wherein V is CR⁷R⁸.

16. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 15, wherein R⁷ is:

(i) hydroxy group,

(ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with;

(1) halogen atom,

(2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(3) amino group,

(4) carboxy group or

(5) hydroxy group,

(iii) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(iv) C₁₋₆ alkylamino group,

(v) di-C₁₋₆ alkylamino group, or

(vi) carboxy group, and

R⁸ is hydrogen atom or C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(i) halogen atom,

(ii) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(iii) amino group,

(iv) carboxy group or

(v) hydroxy group, or

R⁷ and R⁸ together are =O or =S.

17. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 16, wherein R⁷ is:

(i) hydroxy group,

(ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with halogen atom, hydroxy group or carboxy group or

(iii) carboxy group, and

R^8 is hydrogen atom or C_{1-6} alkyl group, wherein the alkyl group may be substituted with halogen atom, hydroxy group or carboxy group, or

R^7 and R^8 together are =O.

18. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 17, wherein R^7 is hydroxy group, and R^8 is hydrogen atom.

19. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 15, wherein m is an integer of 1 to 2, n is 0, and R^6 is C_{6-14} aryl group or C_{2-9} heteroaryl wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R^{18} wherein R^{18} has the same meaning as R^{10} .

20. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 19, wherein R^7 is:

(i) hydroxy group,

(ii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:

(1) halogen atom,

(2) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(3) amino group,

(4) carboxy group or

(5) hydroxy group,

(iv) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(v) C_{1-6} alkylamino group,

(vi) di- C_{1-6} alkylamino group, or

(vii) carboxy group, and

R^8 is hydrogen atom or C_{1-6} alkyl group, wherein the alkyl group may be substituted with:

- (i) halogen atom,
- (ii) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
- (iii) amino group,
- (iv) carboxy group or
- (v) hydroxy group, or

R^7 and R^8 together are $=O$ or $=S$.

21. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 20, wherein R^7 is:

- (i) hydroxy group,
- (ii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with halogen atom, hydroxy group or carboxy group or
- (iii) carboxy group, and

R^8 is hydrogen atom or C_{1-6} alkyl group, wherein the alkyl group may be substituted with halogen atom, hydroxy group or carboxy group,
or R^7 and R^8 together are $=O$.

22. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 21, wherein R^7 is hydroxy group, and R^8 is hydrogen atom.

23. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 22, wherein m is 1, n is 0, and R^6 is C_{6-14} aryl group,

wherein the aryl group may be substituted with 1 to 3 halogen atom or amino group, and when a plurality of substituents are present, they may be identical or different from each other.

24. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 15, wherein m is an integer of 1 to 2, n is 0, and

R⁶ is:

(i) C₁₋₄ alkyl group, wherein the alkyl group may be substituted with;

(1) halogen atom,

(2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(3) amino group,

(4) carboxy group or

(5) hydroxy group,

(ii) C₃₋₈ cycloalkyl group or C₃₋₈ cycloalkenyl group, wherein the cycloalkyl group or cycloalkenyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(a) halogen atom,

(b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(c) amino group,

(d) carboxy group or

(e) hydroxy group,

(3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(3) amino group,

(4) carboxy group or

(5) hydroxy group, or

(iii) C₂₋₉ heterocyclyl group, wherein the heterocyclyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(a) halogen atom,

(b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(c) amino group,

(d) carboxy group or hydroxy group,

(3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(4) amino group,

(5) carboxy group or

(6) hydroxy group.

25. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 24, wherein R⁷ is;

(i) hydroxy group,

(ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkoxy group, wherein C₁₋₆ alkoxy group may be substituted with halogen atom,

(3) amino group,

(4) carboxy group or

(5) hydroxy group,

(iii) C₁₋₆ alkoxy group, wherein C₁₋₆ alkoxy group may be substituted with halogen atom,

- (iv) C₁₋₆ alkylamino group,
- (v) di-C₁₋₆ alkylamino group, or
- (vi) carboxy group, and

R⁸ is

- (i) hydrogen atom or
- (ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:
- (iii) halogen atom,
- (iv) C₁₋₆ alkoxy group, wherein C₁₋₆ alkoxy group may be substituted with halogen atom,
- (v) amino group,
- (vi) carboxy group or
- (vii) hydroxy group, or

R⁷ and R⁸ together are =O or =S.

26. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 25, wherein R⁷ is:

- (i) hydroxy group,
- (ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:
 - (1) halogen atom,
 - (2) hydroxy group or
 - (3) carboxy group or
- (iii) carboxy group, and

R⁸ is hydrogen atom or C₁₋₆ alkyl group, wherein the alkyl group may be substituted with halogen atom, hydroxy group or carboxy group, or

R⁷ and R⁸ together are =O.

27. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 26, wherein R^7 is hydroxy group, and R^8 is hydrogen atom.

28. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 27, wherein R^6 is n-propyl group, i-propyl group, c-pentyl group, c-hexyl group, 1-c-pentenyl group, 2-c-pentenyl group, 3-c-pentenyl group, 1-c-hexenyl group, 2-c-hexenyl group or 3-c-hexenyl group.

29. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 15, wherein R^7 and R^8 together are =O or =S, and R^6 is:

- (i) amino group,
- (ii) C_{1-6} alkylamino group,
- (iii) di- C_{1-6} alkylamino group,
- (iv) C_{6-14} arylamino group or C_{2-9} heteroaryl amino group, wherein each of the arylamino group or heteroaryl amino group may be substituted with:

(1) 1 to 3 R^{18} , wherein R^{18} has the same meaning as R^{10} , or

(2) C_{2-9} heterocyclyl group, wherein the heterocyclyl group may be substituted with:

(a) halogen atom,

(b) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:

(A) halogen atom,

(B) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(C) amino group,

(D) carboxy group or

(E) hydroxy group,

- (c) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
- (d) amino group,
- (e) carboxy group or
- (f) hydroxy group.

30. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 4, wherein V is NR⁹.

31. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 30, wherein m is an integer of 1 to 3, n is 0, and R⁶ is C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group, wherein each of the aryl group or heteroaryl group may be substituted with 1 to 3 R¹⁸, wherein R¹⁸ has the same meaning as R¹⁰.

32. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 31, wherein m is 2.

33. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 30, wherein m is an integer of 1 to 3, n is 0 and R⁶ is:

(i) hydrogen atom,

(ii) C₂₋₄ alkyl group, wherein the alkyl group may be substituted with:

(1) halogen atom,

(2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(3) amino group,

(4) carboxy group or

(5) hydroxy group,

(iii) C₃₋₈ cycloalkyl group or C₃₋₈ cycloalkenyl group, wherein the cycloalkyl group or

cycloalkenyl group may be substituted with:

- (1) halogen atom,
 - (2) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:
 - (a) halogen atom,
 - (b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (c) amino group,
 - (d) carboxy group or
 - (e) hydroxy group,
 - (3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (4) amino,
 - (5) carboxy group or
 - (6) hydroxy group, or
- (iv) C₂₋₉ heterocyclyl group, wherein the heterocyclyl may be substituted with:
- (1) halogen atom,
 - (2) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:
 - (a) halogen atom,
 - (b) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (c) amino group,
 - (d) carboxy group or
 - (e) hydroxy group,
 - (3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(4) amino group,

(5) carboxy group or

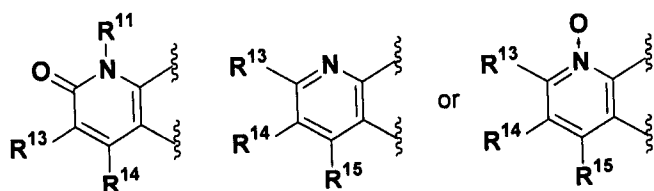
(6) hydroxy group.

34. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 33, wherein m is 2.

35. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 3, which is the compound of formula (I).

36. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 3, which is the compound of formula (II).

37. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 8, wherein the ring structure of A is



wherein R^{11} , R^{13} , R^{14} and R^{15} have the above-mentioned meanings.

38. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 37, wherein R^{11} is:

(i) hydrogen atom or

(ii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:

(1) halogen atom,

(2) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom,

(3) amino group or

(4) hydroxy group, and

R^{13} , R^{14} and R^{15} are independently of each other

- (i) hydrogen atom,
- (ii) halogen atom,
- (iii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with:
 - (1) halogen atom,
 - (2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom
 - (3) amino group, or
 - (4) hydroxy group,
- (iv) C₃₋₈ cycloalkyl group, wherein the cycloalkyl group may be substituted with;
 - (1) halogen atom,
 - (2) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (3) amino group or
 - (4) hydroxy group,
- (v) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with:
 - (1) halogen atom,
 - (2) amino group,
 - (3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom or
 - (4) hydroxy group,
- (vi) C₁₋₆ alkylcarbonyl group,
- (vii) aminocarbonyl group,
- (viii) amino group,
- (ix) carboxy group or

(x) cyano group.

39. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 38, wherein R^{11} is;

(i) hydrogen atom or

(ii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group, and

R^{13} , R^{14} and R^{15} are independently of each other:

(i) hydrogen atom,

(ii) halogen atom,

(iii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group,

(iv) carboxy group,

(v) amino group or

(vi) cyano group.

40. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 39, wherein

R^{11} is hydrogen atom,

R^{13} is hydrogen atom, halogen atom, carboxy group or C_{1-6} alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group,

R^{14} is hydrogen atom, and

R^{15} is hydrogen atom, halogen atom or C_{1-6} alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group..

41. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 8, wherein the ring structure of A is



wherein R^{11} , R^{12} , R^{13} and R^{14} have the above-mentioned meanings.

42. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 41, wherein R^{11} and R^{12} are independently of each other;

- (i) hydrogen atom or
- (ii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:
 - (1) halogen atom,
 - (2) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (3) amino group or
 - (4) hydroxy group, and

R^{13} and R^{14} are independently of each other

- (i) hydrogen atom,
- (ii) halogen atom,
- (iii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:
 - (1) halogen atom,
 - (2) amino group,
 - (3) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom or
 - (4) hydroxy group,
- (iv) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with:
 - (1) halogen atom,

(2) amino group,

(3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom, or

(4) hydroxy group.

(v) C₁₋₆ alkylcarbonyl group,

(vi) amino group or

(vii) cyano group.

43. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 42, wherein R¹¹ and R¹² are independently of each other;

(i) hydrogen atom or

(ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group, and

R¹³ and R¹⁴ are independently of each other;

(i) hydrogen atom,

(ii) halogen atom,

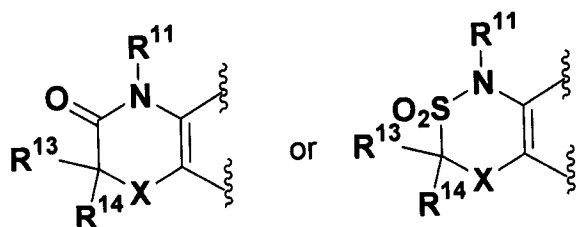
(iii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group,

(iv) amino group or

(v) cyano group.

44. (Original) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 43, wherein R¹¹, R¹², R¹³ and R¹⁴ are hydrogen atom.

45. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 8, wherein the ring structure of A is



wherein R^{11} , R^{13} and R^{14} have the above-mentioned meanings.

46. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 45, wherein R^{11} is:

- (i) hydrogen atom or
- (ii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:
 - (1) halogen atom,
 - (2) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom,
 - (3) amino group or
 - (4) hydroxy group,

R^{13} and R^{14} are independently of each other;

- (i) hydrogen atom,
- (ii) halogen atom,
- (iii) C_{1-6} alkyl group, wherein the alkyl group may be substituted with:
 - (1) halogen atom,
 - (2) amino group,
 - (3) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with halogen atom or
 - (4) hydroxy group,
- (iv) C_{1-6} alkoxy group, wherein the alkoxy group may be substituted with:
 - (1) halogen atom,

- (2) amino group,
- (3) C₁₋₆ alkoxy group, wherein the alkoxy group may be substituted with halogen atom, or
- (4) hydroxy group),
- (v) amino group or
- (vi) cyano group, and

X is O, S, SO or SO₂.

47. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 46, wherein R¹¹ is:

- (i) hydrogen atom or
- (ii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group,

R¹³ and R¹⁴ are independently of each other:

- (i) hydrogen atom,
- (ii) halogen atom or
- (iii) C₁₋₆ alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group, and

X is O.

48. (Previously Presented) The benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 47, wherein

R¹¹ is hydrogen atom or C₁₋₆ alkyl group, wherein the alkyl group may be substituted with halogen atom, amino group or hydroxy group,

R¹³ and R¹⁴ are hydrogen atom, and

X is O.

49-51. (Canceled)

52. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is

2,2,7,9-tetramethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

2,2,7-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

3-hydroxy-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-7-carbonitrile,

3-hydroxy-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-7-carboxamide,

{3-hydroxy-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-7-yl} ethanone,

3,3-dimethyl-1-[(2-phenylethyl)amino]-2,3-dihydro-1H1H-pyrano[3,2-f]quinolin-2-ol,

7-hydroxymethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

3-hydroxy-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-carboxylic acid,

7-chloro-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

4-(benzylamino)-7-chloro-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-{[2-(1,3-benzodioxol-5-yl)methyl]amino}-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-[(3-phenylpropyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-{{2-(4-fluorophenyl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-{{2-(2-fluorophenyl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-{{2-(4-chlorophenyl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

4-{{2-(4-aminophenyl)ethyl}amino}-7-chloro-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[(2-hydroxy-2-phenylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-(2-phenylbutyl)amino}-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-{{2-(1,3-benzodioxol-5-yl)ethyl}amino}-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-{{2-(1-piperidinyl)ethyl}amino}-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-{{2-(1-methyl-2-pyrrolidinyl)ethyl}amino}-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

4-[(2-anilinoethyl)amino]-7-chloro-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-({2-[ethyl(3-methylphenyl)amino]ethyl}amino)-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-{{[(1-ethyl-(R)-2-pyrrolidinyl)methyl]amino}-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-[(2,2-diethoxyethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-[[2-(3-thienyl)ethyl]amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

~~7-chloro-4-[2-(1-pyrazolylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol,~~ 4-[2-(1H-pyrazol-1-yl)ethylamino]-7-chloro-2,2,9-trimethyl-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[[2-(4-methylpyrazol-1-yl)ethylamino]-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[[2-(4-chloropyrazol-1-yl)ethyl]amino]-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[2-(2-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[2-(3-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[2-(4-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-ethylamino-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-isobutylamino-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[(cyclopropylmethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-isoamylamino-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[2-(cyclopentylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-
pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[2-(1-cyclopentenylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-
pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-[(1,4-dimethylpentyl)amino]-3,4-dihydro-~~2H2H~~-
pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-(pentylamino)-3,4-dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-
ol,

7-chloro-4-[(2-cyclohexylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-
g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-[(2-tetrahydro-2H-pyran-4-ylethyl)amino]-3,4-dihydro-
~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-[(2-tetrahydro-2H-thiopyran-4-ylethyl)amino]-3,4-dihydro-
~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-({[6-(4-chlorophenyl)-3-pyridinyl]methyl}amino)-2,2,9-trimethyl-3,4-
dihydro-~~2H2H~~-pyrano[2,3-g]quinolin-3-ol,

4-[(2-benzofuranylmethyl)amino]-7-chloro-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-
pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[(2-hydroxypentyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~-pyrano[2,3-
g]quinolin-3-ol,

7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-~~7H7H~~-pyrano[2,3-g]quinoxalin-
8-ol, 9-{[2-(2-fluorophenyl)ethyl]amino}-7,7-dimethyl-8,9-dihydro-~~7H7H~~-pyrano[2,3-
g]quinoxalin-8-ol,

9-{[2-(4-fluorophenyl)ethyl]amino}-7,7-dimethyl-8,9-dihydro-~~7H7H~~-pyrano[2,3-
g]quinoxalin-8-ol,

9-[(2-hydroxy-2-phenylethyl)amino]-7,7-dimethyl-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

7,7-dimethyl-9-(pentylamino)-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

2,3,7,7-tetramethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

2,3-diethyl-7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

~~3,7,7-trimethyl-2-phenyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol,~~ 3,7,7-trimethyl-9-[(2-phenylethyl)amino]-2-phenyl-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol,

~~2,7,7-trimethyl-3-phenyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol,~~ 2,7,7-trimethyl-9-[(2-phenylethyl)amino]-3-phenyl-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol,

3,7,7-trimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

9-[(2-cyclohexylethyl)amino]-7,7-dimethyl-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

~~7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-anthracen-3-on,~~ 7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-anthracen-3-one,

~~7-hydroxy-4,6,6-trimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-anthracen-3-on,~~ 7-hydroxy-4,6,6-trimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-anthracen-3-one,

6,6-dimethyl-8-(2-phenylethylamino)-2,3,4,6,7,8-hexahydro-1,5-dioxo-4-aza-anthracen-7-ol,

~~7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-7,8-dihydro-1H,6H-4,5-dioxo-1-aza-anthracen-2-one~~, 7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-7,8-dihydro-1H,6H-4,5-dioxo-1-aza-anthracen-2-one,

6,6-dimethyl-8-(2-phenylethylamino)-2,3,7,8-tetrahydro-~~1H,6H~~1H,6H-4,5-dioxo-1-aza-anthracen-7-ol,

9-hydroxymethyl-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinolin-3-ol,

2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinoline-3,7-diol,

7-aminomethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-5-oxy-4-[(2-phenylethyl)amino]-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-{[2-(4-fluorophenyl)ethyl]amino}-2,2,9-trimethyl-5-oxy-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-5-oxy-4-(pentylamino)-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinolin-3-ol,

4-{[2-(fluorophenyl)ethyl]amino}-7-hydroxymethyl-2,2,9-trimethyl-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinolin-3-ol or

2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinolin-3-ol.

53. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is

2,2,7-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-~~2H2H~~2H2H-pyrano[2,3-g]quinolin-3-ol,

3,3-dimethyl-1-[(2-phenylethyl)amino]-2,3-dihydro-1~~H~~1H-pyrano[3,2-f]quinolin-2-ol,
 7-hydroxymethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2~~H~~2H-
 pyrano[2,3-g]quinolin-3-ol,
 7-chloro-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2~~H~~2H-pyrano[2,3-
 g]quinolin-3-ol,
 7-chloro-4-{[2-(4-fluorophenyl)ethyl]amino}-2,2,9-trimethyl-3,4-dihydro-2~~H~~2H-
 pyrano[2,3-g]quinolin-3-ol,
 7-chloro-4-{[2-(2-fluorophenyl)ethyl]amino}-2,2,9-trimethyl-3,4-dihydro-2~~H~~2H-
 pyrano[2,3-g]quinolin-3-ol,
 7-chloro-4-{[2-(4-chlorophenyl)ethyl]amino}-2,2,9-trimethyl-3,4-dihydro-2~~H~~2H-
 pyrano[2,3-g]quinolin-3-ol,
 3-hydroxy-2,2,9-trimethyl-4-[2-(phenylethyl)amino]-3,4-dihydro-2~~H~~2H-pyrano[2,3-
 g]quinoline-7carboxylic acid,
 4-{[2-(4-aminophenyl)ethyl]amino}-7-chloro-2,2,9-trimethyl-3,4-dihydro-2~~H~~2H-
 pyrano[2,3-g]quinolin-3-ol,
 7-chloro-4-[(2-hydroxy-2-phenylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2~~H~~2H-
 pyrano[2,3-g]quinolin-3-ol,
 7-chloro-2,2,9-trimethyl-4-{[2-(1-piperidinyl) ethyl]amino}-3,4-dihydro-2~~H~~2H-
 pyrano[2,3-g]quinolin-3-ol,
 7-chloro-4-{[2-(4-chloropyrazol-1-yl)ethyl]amino}-2,2,9-trimethyl-3,4-dihydro-
 2~~H~~2H-pyrano[2,3-g]quinolin-3-ol,
 7-chloro-4-[2-(2-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2~~H~~2H-pyrano[2,3-
 g]quinolin-3-ol,
 7-chloro-4-[2-(3-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2~~H~~2H-pyrano[2,3-
 g]quinolin-3-ol,

7-chloro-4-[2-(4-pyridylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H~~2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-isoamylamino-2,2,9-trimethyl-3,4-dihydro-~~2H~~2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[2-(cyclopentylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H~~2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[2-(1-cyclopentenylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H~~2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-4-(pentylamino)-3,4-dihydro-~~2H~~2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[(2-cyclohexylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H~~2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-[(2-hydroxypentyl)amino]-2,2,9-trimethyl-3,4-dihydro-~~2H~~2H-pyrano[2,3-g]quinolin-3-ol,

7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

9-{[2-(2-fluorophenyl)ethyl]amino}-7,7-dimethyl-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

9-{[2-(4-fluorophenyl)ethyl]amino}-7,7-dimethyl-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

9-[(2-hydroxy-2-phenylethyl)amino]-7,7-dimethyl-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

7,7-dimethyl-9-(pentylamino)-8,9-dihydro-~~7H~~7H-pyrano[2,3-g]quinoxalin-8-ol,

9-[(2-cyclohexylethyl)amino]-7,7-dimethyl-8,9-dihydro-~~7H~~7H-pyrano[2,3-

g]quinoxalin-8-ol,

~~7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-anthracen-3-on,~~ 7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-anthracen-3-one,

7-hydroxy-4,6,6-trimethyl-8-(2-phenylethylamino)-4,6,7,8-tetrahydro-1,5-dioxo-4-aza-anthracen-3-one,

7-hydroxy-6,6-dimethyl-8-(2-phenylethylamino)-7,8-dihydro-1H,6H1H,6H-4,5-dioxo-1-aza-anthracen-2-one,

9-hydroxymethyl-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol,

2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinoline-3,7-diol,

7-aminomethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-5-oxy-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-4-{[2-(4-fluorophenyl)ethyl]amino}-2,2,9-trimethyl-5-oxy-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

7-chloro-2,2,9-trimethyl-5-oxy-4-(pentylamino)-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol,

4-{[2-(4-fluorophenyl)ethyl]amino}-7-hydroxymethyl-2,2,9-trimethyl-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol or

2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H2H-pyrano[2,3-g]quinolin-3-ol.

54. (Previously Presented) A method of treating arrhythmia comprising the step of administering to a patient an effective dosage of a pharmaceutical compound, wherein the pharmaceutical compound comprises the benzopyran derivative or pharmaceutically acceptable salt thereof according to claim 1.

55. (Canceled)

56. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is ~~2,2,7-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.~~ 2,2,7-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

57. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is ~~7-hydroxymethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.~~ 7-hydroxymethyl-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

58. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is ~~7-chloro-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.~~ 7-chloro-2,2,9-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

59. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is ~~7-chloro-2,2,9-trimethyl-4-[[2-(3-pyridyl)ethyl]amino]-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.~~ 7-chloro-4-[[2-(3-pyridyl)ethyl]amino]-2,2,9-trimethyl-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

60. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is ~~7-chloro-4-[(2-cyclohexylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.~~ 7-chloro-4-[(2-cyclohexylethyl)amino]-2,2,9-trimethyl-3,4-dihydro-2H-pyrano[2,3-g]quinolin-3-ol.

61. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is ~~7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol~~ is 7,7-dimethyl-9-[(2-phenylethyl)amino]-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol.

62. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is ~~9-[[2-(4-fluorophenyl)ethyl]amino]-7,7-dimethyl-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol~~ 9-[[2-(4-fluorophenyl)ethyl]amino]-7,7-dimethyl-8,9-dihydro-7H-pyrano[2,3-g]quinoxalin-8-ol.

63. (Currently Amended) A benzopyran derivative or pharmaceutically acceptable salt thereof which is ~~7-hydroxy-6,6-dimethyl-8-[(2-phenylethyl)amino]-7,8-dihydro-1H,6H-4,5-dioxo-1-aza-anthracen-2-one~~ 7-hydroxy-6,6-dimethyl-8-[(2-phenylethyl)amino]-7,8-dihydro-1H,6H-4,5-dioxo-1-aza-anthracen-2-one.